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ABSTRACT

Using case studies and the case method of instruction to improve teaching and learning have been reported in the education literature since the early 1900s. The popularity of these techniques and strategies increased in the 1950s. The impetus for using these strategies came from C. Christensen and A. Hanson, and Moore's "Teaching and the Case Method" (1987). Much of the literature relates to the use of these instructional strategies in higher and professional education. However, there appears to be a dearth of data on the usefulness of these techniques, especially in K-12 schools. The paper discusses implications for research and practice. (Contains 18 references.) (SLD)

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Case Studies and Methods in Teaching and Learning

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Abstract

Using case studies and the case method of instruction to improve teaching and learning have been reported in the education literature since the early 1900s (e.g., Whipple, 1913). The popularity of these techniques/strategies increased in the 1950s (e.g., Castore, 1950; Hunt, 1957). The impetus in using these strategies came from Christensen, Hanson, and Moore's (1987) *Teaching and the case method.* Much of the literature relates to the use of these instructional strategies in higher and professional education. However, there appears to be a dearth of data reported to date on the usefulness of these techniques, especially in K-12 schools. Implications for research and practice will be discussed.

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The purpose of this presentation is to discuss the effectiveness of using case studies and the case method as instructional strategies for educators, as well as to discuss their effects on learning. Using case studies and the case method of instruction (CMI) to improve teaching and learning have been reported in the education literature since the 1900s (e.g., Whipple, 1913). Their popularity increased in the 1950s (e.g., Castore, 1950; Hunt, 1957). The resurgence in popularity of these strategies came from Christensen, Hanson, and Moore's (1987) *Teaching and the case method.* Much of the literature relates to the use of these instructional strategies in higher education and professional education. Unfortunately, there appears to be a dearth of data reported on the usefulness of these techniques from kindergarten to college.

To use CMI, teachers must change their methods of instruction, such as recitation, to methods, such as modeling, coaching, and scaffolding (Hmelo, 1993; Williams, 1992), as well as using large and small group discussions (McWilliam, 1992). In addition, students would require more activity in the learning process and also more responsibility for their learning (Ciardello, 1995). According to McWilliam (1992), the most used format in CMI is large group discussion, which is generally facilitated by the instructor. However, McWilliam noted that the small group format was also effective in accomplishing some teaching objectives. CMI is a constructivist approach that involves active learning (Gideonse, 1999). Gideonse mentioned that case learning is constructivist for the student and the teacher. Thus, the teacher's instruction is "constructivist". It is ASSUMED, however, that students in CMI classes will develop critical thinking skills and improve their learning.

Also, definitions and/or descriptions of cases and case learning need to be explicated. For example, Gideonse (1999) stated that cases are oriented towards practice, are specific, complex, and problematic and invite controversy. On the other hand, case learning is "holistic" and

"oblige us to go beyond what we know. They demand we address ... what we ought" (Gideonse, 1999, p. 2).

Gideonse also differentiates case instruction from cases. That is, case instruction is constructivist in its approach to teaching. He stated "The whole purpose behind case instruction is to engage the perceptual, problem identification and analysis, and decision making capacities of students with the aim of honing those capacities to ever higher states of effectiveness" (p. 3). Further, this type of instruction is very demanding, and focuses on the application of skills. This, in turn, should facilitate students' independent thinking. (See Gideonse [1999] for a description of the five characteristics of case instruction; i.e., preparation, delivery of instruction, assessment, training, and resources.) In using CMI, the instructor has several options to consider. These include "(a) excessive use of the case method, (b) predominant use of the case method with mini-lectures, (c) case method embedded within an existing curriculum, or (d) case method dispersed across a series of courses or workshops" (McWilliam, 1992, p. 366).

Using case studies is a very demanding enterprise and focuses on the application of skills, instead of rote memorization of content. However, Sudzina (1999) noted that teaching with cases is not for all educators and that it is not a "panacea" for ineffective teachers or unmotivated students. Sudzina suggested that case-based teaching works best with flexible and reflective teachers, who are facilitators of knowledge. She also posed several difficulties with teaching with cases, such as students not quite comprehending the issue or process of the case. In addition, case studies do not provide "implicit or explicit" solutions to the problems presented in the cases (McWilliam, 1992). McWilliam (1992) reported that there is variation in the use of CMI. It was noted also that there were several key elements that differentiate it from typical discussion methods used in schools. Among them are "(a) an emphasis on teaching the general

skills of decision-making and problem solving, (b) the use of real-life situations, and (c) active student participation in the learning process" (p. 361). Thus, it appears that contrary to many educators' beliefs, teaching with cases requires much preparation and organization, and that not all students fully understand the issue that is presented in the case.

McWilliam (1992) also noted that changing one's instructional method to CMI might create challenges for educators. The following are potential impediments to incorporating CMI into the classroom: "(a) changes in the roles of instructors and trainees, (b) time allocated for training, (c) the availability of case materials for training, and (d) the need for empirical verification of the method" (McWilliam, 1992, p. 370). The last comment is extremely important. That is, without empirical verification of CMI, educators will have to make "assumptions" that this technique will enhance students' learning. The studies reported later in this paper do not indicate that there is unequivocal support for positive learning outcomes based on the use of CMI.

The Literature

Interestingly, Stewart (2002), and Rubin and Roessler (1995) supported the use of case studies in training rehabilitation counselors. However, Stewart (2002) reported that few case studies were published in the journals, (e.g., *Rehabilitation Education),* he reviewed for his article.

In addition, Adams (1992) studied 11th grade students and found that their tolerance to other students' viewpoints increased, as well as their sensitivity to their peers when case studies were used (in Ciardello, 1995). However, no academic gains were reported for these students. Although this may be a shortfall of public school studies, as Ciardello (1995) noted, using cases provides an "authentic" learning environment. The research reviewed for this paper suggests that

case studies and CMI are effective in higher and professional education, (e.g., Darling, 1995; Hover, 1951; Levin, 1995; Whipple, 1913). However, these papers reported no data to support the authors' recommendations.

Beckman (1972) and Smith (1987) reviewed studies on knowledge acquisition, retention, and application. They found that most of the research they reviewed showed "little or no difference in knowledge acquisition between lecture and discussion and case methods" (in McWilliam, 1992, p. 371). However, McWilliam (1992) reported that both researchers found that discussion and case methods were better than lecture methods in knowledge retention and application, as well as developing students' problem-solving skills (Smith, 1987).

Unfortunately, the empirical evidence regarding the effectiveness of CMI is mixed. That is, some studies support the use of CMI, (e.g., Castore, 1950; Clark, Koyano, & Nivichanov, 1993; Papaloizos & Stiefel, 1971; Vaughan, DeBiase, & Gibson-Howell, 1998; Watson, 1975), and some studies do not (e.g., Griffith, 1971; Ostlund, 1956). Perhaps the lack of definitive research was due to methodological weaknesses, which were found in several of the studies.

Methodology

For example, Castore (1950) had an all male sample, which may have biased his conclusions. Papaloizos and Stiefel (1971) sent a questionnaire to 207 teachers and had 55 responses, a low 27% response rate. Clark et al. (1993) used computer-assisted instruction in CMI. However, there was one computer available for 65 dental students in the experimental group. This is an obvious shortcoming of the study. Vaughan et al. (1998) sent a nine-item survey addressing CMI to directors of 215 dental hygiene programs. A short survey such as this has potential negative implications for the reliability of the survey, and the reliability and validity of the results. Weaknesses in the Watson (1975) study include no script of the topic

being used for different sections of the class. Also, only one judge was used "to assure the grading consistency" of examination scoring (p. 111). This consistency without conducting an inter-rater reliability test may be suspect.

Conclusions

Based upon the research on the use of case studies and CMI, perhaps there should be a reconsideration of the use of these strategies for improving teaching and learning. Additionally, empirical verification of CMI is a must; otherwise educators will have to make ASSUMPTIONS that this technique will enhance students' learning.

Implications for Research

First, more empirical studies must be conducted in K-16 educational settings to assist educators in their decision making as to the usefulness of CMI, etc.; considering the fact that many studies have been conducted in professional schools. In fact, few studies were reported in the literature reviewed for this paper on the use of CMI in the elementary grades. Are elementary students not cognitively capable of the problem solving involved in CMI? Second, the research that is conducted should be methodologically sound. As mentioned previously, there were some problems with the methods in the research reported in this paper, (e.g., biased sampling).

Implications for Practice

First, pre-service and in-service teachers should be trained in the use of CMI. This training would facilitate the case learning abilities of their students. Second, teachers must remove the "myths" associated with CMI, such as "[l]ittle or no preparation is necessary with cases" (Sudzina, [1999], p. 10). Third, CMI is not the "panacea" for effective teaching and learning. Many factors influence the effectiveness of CMI, and the literature is also replete with research on effective teaching and effective teachers.

References

Adams, M.E. (1992). *The response to eleventh graders to the use of the case method of instruction in social studies.* Unpublished master's thesis, Simon Fraser University, Bambry, B.C. (cited in Ciardiello, 1995).

Castore, G.F. (1950). An evaluation of students' reactions to eight cases in a human relations course taught by the case-method. *American Psychologist, 5*, 246.

Christensen, C.R., & Hansen, A.J. (1987). *Teaching and the case method: Text, cases and readings.* Boston: Harvard Business School.

Ciardiello, AN. (1995). A case for case-based instruction. In C.N. Headley, P. Antonacci, & M. Rabinowitz (Eds.), *Thinking and literacy: The mind at work.* Hillsdale, NJ: Erlbaum.

Clark, G.T., Koyano, K., & Nivichanov, A. (1993). Case-based learning for orofacial pain and temporomandibular disorders. *Journal of Dental Education, 57*, 815-820.

Gideonse, H.D. (1999). What is a case? What distinguishes case instruction? In M.R. Sudzina (Ed.), *Case study applications for teacher education: Cases of teaching and learning in the content areas* (pp. 1-7). Boston: Allyn & Bacon.

Griffith, J.R. (1971). The case method for teaching college economics. *College Student Journal, 5*, 82-85.

Hunt, P. (1951). The case method of instruction. *Harvard Educational Review, 21*, 175-192.

Levin, B.B. (1995). Using the case method in teacher education: The role of discussion and experience in teachers' thinking about cases. *Teaching & Teacher Education, 11*, 63-79.

Ostlund, L.A. (1956). An experimental study of case-discussion learning. *Journal of Experimental Education, 25*, 81-89.

Papaloizos, A., & Stiefel, R. (1971). Effectiveness of participative teaching methods. *Alberta Journal of Educational Research, 17*, 179-190.

Rubin, S.E., & Roessler, R.T. (1995). *Foundations of the vocational rehabilitation* process (4th ed.). Austin,TX: PRO-ED.

Stewart, J. R. (2002). Supplementing the scientific method with alternative approaches to rehabilitation research. *Rehabilitation Education, 16*, 227-236.

Sudzina, M.R. (1999). Guidelines for teaching with cases. In M.R. Sudzina (Ed.), *Case study applications for teacher education: Cases of teaching and learning in the content areas* (pp. 9-19). Boston: Allyn & Bacon.

Sudzina, M.R. (Ed.) (1999). *Case study applications for teacher education: Cases of teaching and learning in the content areas.* Boston: Allyn & Bacon.

Vaughn, D.A., DeBiase, C.B., & Gibson-Howell, J.C. (1998). Use of case-based learning in dental hygiene curricula. *Journal of Dental Education, 62*, 257-259.

Watson, C.E. (1975). The case-study method and learning effectiveness. *College Student Journal, 9*, 109-116.

Whipple, G.M. (1913). The 'case method' in educational psychology. *Journal of Educational Psychology, 4*, 487-488.

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